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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KNABLE, GEOFFREY L

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 04/22/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/873,330

Applicant(s)

CARETTA ET AL.

Examiner

Geoffrey L. Knable

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 39-57 and 67-80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 46 is/are allowed.
- 6) ☒ Claim(s) 39-45, 47-57 and 67-80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.                      6) ☐ Other: \_\_\_\_\_

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 39-45, 47-57 and 74-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley (US 990,392) taken with Frazier (US 3,356,553).

These references are applied for somewhat similar reasons to those set forth in the last office action but in light of the amendments to the claims requiring that each deposition section extend in a U-shaped confirmation *against* the support or previously deposited section *substantially over an entire length of the respective deposition section*, two substantial changes have been made to the rejection. First, the reference to Rowley is now the primary reference. Second, the reference to Dickinson has been removed from the rejection.

In particular, note that Rowley suggests building a tire carcass by applying a continuous strip element (x) onto a toroidal support (M) in alternating deposition sections defining two side portions and a crown portion. Further, following the teachings of this reference would suggest that the strip is deposited to be in contact with the support or other deposition section over substantially their entire length as now claimed. As to the claim requirement that the strip include plural at least partly coated parallel longitudinal thread elements, the reference indicates that the strip is "friction fabric"<sup>1</sup> (page 1, lines 13-15) but does not further characterize this material. It however is considered to have been implicit or in any event certainly obvious in this art to include

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<sup>1</sup> This is an older term that is believed to refer to a reinforcement fabric coated or "frictioned" with uncured rubber (e.g. by calendaring).

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longitudinal reinforcement in the strip – Frazier is merely one further example of a somewhat similar strip applied carcasses and in particular note that it evidences that known, conventional and obvious nature of using such longitudinal reinforcement in such strips (e.g. “14” and col. 4, lines 65-73). As to the claimed requirement that the strip overlap at the sides and be side-by-side at the crown, it is noted that Rowley does indicate clearly that there is partial overlap at the sides but does not clearly indicate whether or not there is overlap also at the crown. However, in light of Frazier, it is apparent that in similarly strip constructed carcass constructions, it is known to be suitable and effective to provide the successive sections to be overlapped in the side portions and either overlapped or abutted/side-by-side in the crown region (e.g. note esp. col. 6, lines 28-33). In light of the lack of any particular requirement in Rowley with respect to the status of adjacent strips in the crown regions, taken with the clear evidence in the Frazier that either overlapped or abutted strips in the crown region are both suitable and effective carcass constructions, it is considered to have been obvious to form the crown regions following the Rowley teachings to be either overlapped or abutted/side-by-side for only the expected results. In other words, the artisan following the Rowley teachings would have understood that the strips in the sides are clearly partly overlapped and it would have been further understood that the strips in the crown would be either overlapped or side-by-side (the reference providing no explicit teachings or particular requirements in this regard). The Frazier teachings merely further emphasize that either would have been understood to be suitable. This is thus considered to render obvious a method as claimed. The specifics of the other claims

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are addressed for the same substantive reasoning as applied in the last office action, reference being made thereto for a complete explanation thereof.

3. Claims 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley (US 990,392) taken with Frazier (US 3,356,553) as applied above, and further in view of Hollis et al. (US 3,580,781) applied herein for the same substantive reasons as set forth in the last office action.

4. Claims 70 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley (US 990,392) taken with Frazier (US 3,356,553) as applied above, and further in view of Holroyd et al. (US 4,743,322) and Holroyd et al. (US 4,983,239) applied herein for the same substantive reasons as set forth in the last office action.

5. Claims 72 and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowley (US 990,392) taken with Frazier (US 3,356,553) as applied above, and further in view of Laurent (US 4,963,207) applied herein for the same substantive reasons as set forth in the last office action.

6. Claim 46 is allowed for the reasons set forth in the last office action.

7. Applicant's arguments filed 1-30-03 have been fully considered but are unpersuasive and in many respects moot in light of the new grounds of rejection necessitated by the amendment.

With respect to Rowley, now applied as a primary reference, it is argued that this reference does not suggest a strip including parallel threads, etc. as claimed but "[I]nstead it simply discloses an adhesive friction fabric". This argument has been considered but is not persuasive. First, the term "friction fabric" means simply that

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rubber has been coated or “frictioned” (e.g. by calendaring) onto a surface of the reinforcement base. The reference to this tape being “adhesive” is simply a reflection of the fact that the uncured rubber of the tape is tacky and thus will stick to the toroidal mandrel or other tape sections. As to the parallel fibers, it is considered that tire fabric reinforcement commonly and conventionally includes plural parallel warp reinforcement (as well as in some instances, weft threads). Further, it is noted that although the present claims do not define over the inclusion of weft threads, it is extremely common and well known in this art to substitute unidirectional “fabrics” for previously used weft included fabrics (even though there are no weft threads, these are also commonly still referred to as “fabrics”). Further, again note that the Frazier reference is exemplary of the known, conventional and obvious nature of using such longitudinal reinforcement in very similar strips (e.g. “14” and col. 4, lines 65-73).

The arguments with respect to Frazier are principally directed to the specific construction of the carcass in this reference, these arguments being less relevant with the new application of Rowley as a primary reference. The fact that Frazier is a slightly different kind of carcass (i.e. wound around beads) is noted but is not considered that this strongly takes away from the evidentiary teachings for which this reference is now used. In particular, note again that Frazier is applied merely as evidence that (1) tire reinforcement strips for carcasses conventionally are formed from longitudinal reinforcement in rubber, and (2) that a carcass ply that is formed from a continuous strip can suitably function with either overlapped or side-by-side strips in the crown regions, it being considered to have been within the skill of the artisan to select either type for only

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the expected results. Importantly, note that following the Rowley teachings, the strips in the sides are clearly partly overlapped and it would have been further understood that the strips in the crown would be either overlapped or side-by-side (the reference providing no explicit teachings or particular requirements in this regard). The Frazier teachings merely further emphasize that either would have been understood to be suitable.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 703-308-2062. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Geoffrey L. Knable  
Primary Examiner  
Art Unit 1733

G. Knable  
April 19, 2003